

ABSTRACT

A non-aqueous electrolyte cell having improved cyclic characteristics at elevated temperatures. The non-aqueous electrolyte cell includes a positive electrode, a negative electrode and a non-aqueous electrolyte. The positive electrode contains, as a positive electrode active material, a lithium transition metal composite oxide represented by the general formula $\text{LiCo}_x\text{A}_y\text{B}_z\text{O}_2$ where A denotes at least one selected from the group consisting of Al, Cr, V, Mn and Fe, B denotes at least one selected from the group consisting of Mg and Ca and x, y and z are such that $0.9 \leq x < 1$, $0.001 \leq y \leq 0.05$ and $0.001 \leq z \leq 0.05$.